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OPENING LECTURE

***A Leading Thought,
“Focus Strategy to Improve Safety
in the Workplace”***

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What We'll Talk About

- ❓ Why Safety is Important ?
- ❓ Who needs safety ?
- ❓ Where & How do you start ?
- ❓ Safety accountability
- ❓ Successful Safety Strategy



Statistics told



- **2.78 million workers die due to accidents**
- **374 million workers injury at the workplace**

Source: ILO, 2020



5,333 fatal work injuries

Source: US DOL, 2020



77,295 work related incidents

Source: KEMENAKER, 2020

- Every 7 seconds, a worker is injured on the job in the United States.
- In 2019, 5,333 fatal work injuries were recorded in the United States, a 2% increase from the 5,250 in 2018.
- Falls, trips, and slips caused 27% of non-fatal work-related injuries in the UK in 2019/2020.
- According to the International Labour Organization, 340 million occupational accidents occur worldwide each year.
- Every year, 240 million workers worldwide suffer from work-related diseases or injuries, according to the World Health Organization.
- Approximately 2.78 million people die each year due to work-related accidents and diseases, globally.
- In 2019, the US construction industry recorded the highest number of workplace fatalities at 1,061.
- In the UK, 111 workers suffered fatal accidents between 2019 and 2020, an increase from 147 in the previous year.
- In Europe, work-related accidents result in the loss of approximately 3.3% of the GDP each year.
- In 2019, the US transportation and warehousing sector experienced 251,800 nonfatal workplace injuries and illnesses.
- 30% of all non-fatal workplace injuries in the United States involve retail workers, making it one of the industries with the highest injury rates.
- In Germany, the construction industry had over 103,000 workplace accidents in 2019.
- In Singapore, the construction industry recorded 243 workplace accidents per 100,000 workers in 2019.
- In India, over 48,000 people die every year due to occupational accidents, with the construction industry accounting for the largest percentage.
- In China, from January to November 2020, there were 24,542 workplace accidents, resulting in 26,383 deaths.
- In Brazil, one worker dies every 3.5 hours due to a workplace accident, with construction being the most dangerous industry.

Top 10 Industrial Workplace Accidents in World History

1. **Senghenydd Colliery Disaster (1913)**: This coal mining accident in Wales resulted in the deaths of 439 miners. The cause of the disaster was a methane gas explosion, which led to a devastating underground fire. It remains the worst mining disaster in the UK's history.
2. **Benxihu Colliery Disaster (1942)**: This coal mining accident in China resulted in the deaths of 1,549 miners. The disaster was caused by a coal dust explosion and an underground fire, which spread rapidly throughout the mine.
3. **Bhopal Gas Tragedy (1984)**: A gas leak from a pesticide plant in Bhopal, India, resulted in the deaths of at least 3,787 people and injured thousands more. The disaster was caused by a failure in the plant's safety systems, and it is considered one of the worst industrial accidents in history.
4. **Piper Alpha Oil Platform Disaster (1988)**: An explosion on an oil platform in the North Sea resulted in the deaths of 167 workers. The disaster was caused by a gas leak and a failure of safety systems, which led to a devastating fire on the platform.
5. **The Mont Blanc Tunnel Fire (1999)**: A fire in the Mont Blanc Tunnel between France and Italy resulted in the deaths of 41 people and injured many more. The disaster was caused by a truck carrying hazardous materials that caught fire in the tunnel, which led to a devastating fire.
6. **Upper Big Branch Mine Disaster (2010)**: An explosion in a coal mine in West Virginia resulted in the deaths of 29 miners. The disaster was caused by a buildup of methane gas and a failure to adequately ventilate the mine. It led to significant changes in regulations for the coal mining industry and resulted in criminal charges against the mine's owner.
7. **Rana Plaza Collapse (2013)**: A building collapse in Bangladesh resulted in the deaths of 1,134 garment workers and injured many more. The disaster was caused by the use of substandard building materials and a failure to properly maintain the structure.
8. **Tianjin Explosions (2015)**: A series of explosions at a warehouse in China storing hazardous chemicals resulted in the deaths of 173 people and injured many more. The disaster was caused by a failure to properly store and handle the chemicals, and it led to widespread damage and destruction in the surrounding area.
9. **Grenfell Tower Fire (2017)**: A fire in a high-rise apartment building in London, UK, resulted in the deaths of 72 people and injured dozens more. The disaster was caused by the use of flammable cladding on the building's exterior, and it has led to significant changes in regulations for building safety and fire codes.
10. **Xiangshui Chemical Plant Explosion of 2019**: The 2019 Xiangshui chemical plant explosion was a major disaster that occurred on March 21, 2019 in Chenjiagang Chemical Industry Park, Jiangsu, China. The facility, operated by Tianjiayi Chemical, was used to produce fertilizer or pesticides and had a history of environmental violations and disregard for safety regulations. The explosion resulted in 78 deaths and 617 injuries and was caused by the spontaneous ignition of illegally stored nitrified waste. The State Council of China officially recognized the severity of the accident and found both the company and various departments in Jiangsu Province responsible for the disaster. The incident highlights the need for stronger regulations and enforcement of chemical safety measures.

All of us needs safety



**Safety is a
Human Right !**
(Hanson, 1998)

Impact of Incidents

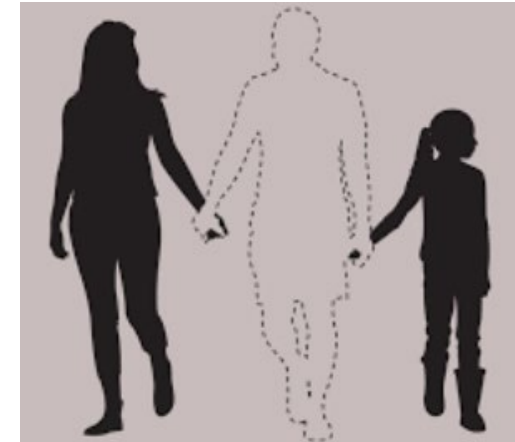
Physical Impact



Psychological Impact



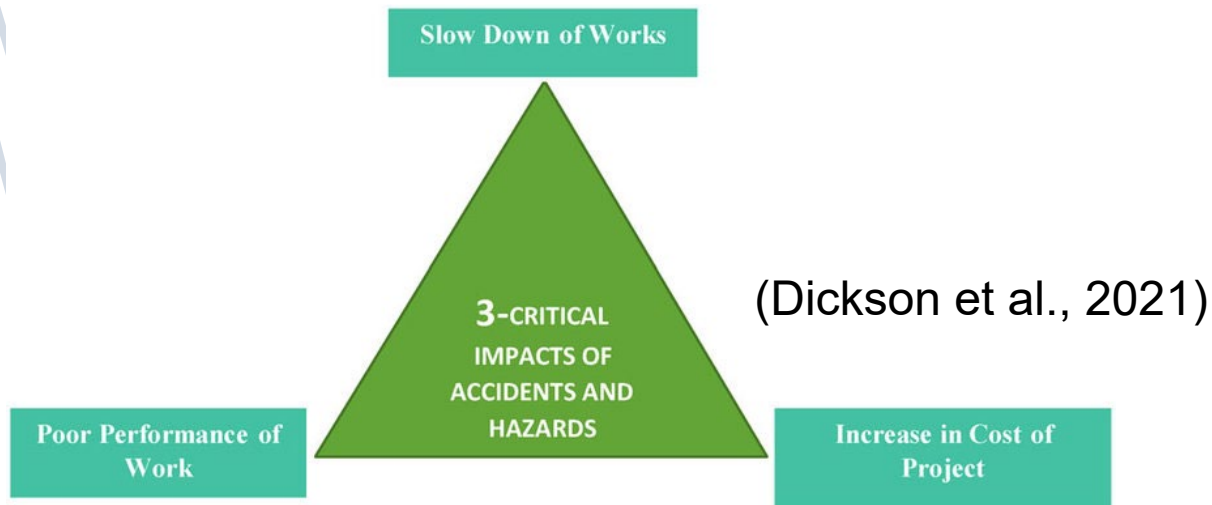
Socio Impact (Non Recoverable)



HAK AHLI WARIS
PEKERJA YANG
MENINGGAL
DUNIA



Business Impact



Money can be recovered but
human life is priceless and
can't be replaced !

Cost of Incidents

DIRECT COSTS

- Wage of the injured on the day of the accident;
- Investigators' salaries;
- Expenses on the accident investigation, fines, etc.

INDIRECT COSTS

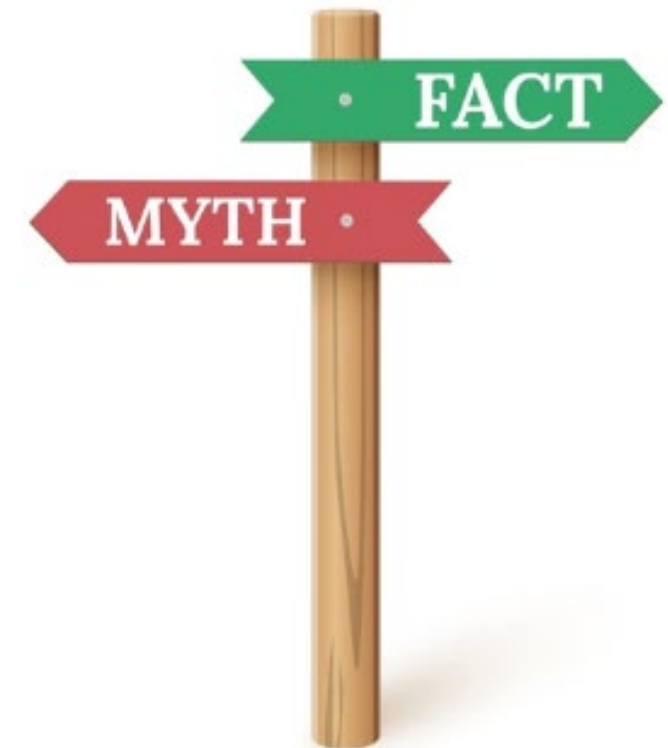
- Workers' loss of time;
- Damaged equipment, tools, raw materials, end products, suspension of production;
- Expenses on restoring safety on the site of the accident;
- Labour hours of workers distracted from their activities;
- Loss of profits;
- Increased insurance premiums to the Social Insurance Fund, etc.



Remember!

Accident-related indirect costs are much higher than the direct ones.
But you can reduce costs through prevention of accidents.
Thus, you will contribute to the development of your enterprise!

Lets discuss some safety myths



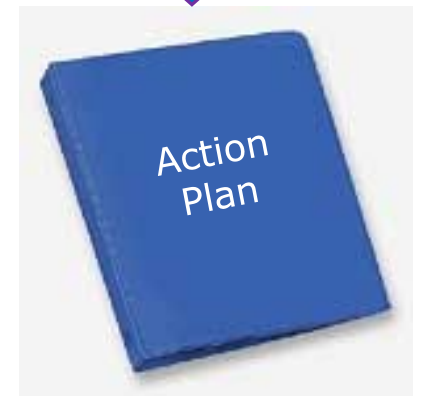
Understand your current state

Determine where you're at currently:

- Do you have a written Safety Program in place?
- Is it actually followed or just a "paper tiger?"
- Is the program reviewed and updated regularly?
- **Is there support from Management for safety?**
- Do employees think **Management really cares about safety**?
- Is safety just a talk, no action?
- Are safety/hazard ID inspections done regularly?
- Do employees feel comfortable reporting safety issues?
- What value do employees put on working safely?
- If there's a Safety Committee, are employees aware of it?
- Are employees given encouragement to work safely and disciplined when they don't?
- Is there an active, trained, "State Certified", Safety Committee in place?
- How many and what type of injuries have occurred in the past two years?



It's ok to take Yearly



Involve Anyone !

Accountability for Safety

An obligation or willingness to accept responsibility or to account for one's actions. Accountability ↔ Responsibility

- Responsibility for safety defined at all levels (from top to bottom, bottom to top)
- Employees follow safety policies/procedures (no exceptions allowed)
- Employees report issues/hazards
- Safety guards placed back on machinery after maintenance
- Employees use PPE properly
- Disciplinary procedures for non-compliance (communicated to all employees)
- Employees empowered to stop their/others work if unsafe situation

**Hold
EVERYONE'S
“feet to the
fire”**

NO EXCUSES, NO
SHORTCUTS

*Safety as a habit all
the time & every
time*

Safety is a journey & needs strategy



THE 11 OIMS ELEMENTS



Revolutionize Safety Strategy Approach

Human and Organizational Performance (HOP) Principles

1. Accept that humans are prone to errors
2. Risky situations are often predictable and preventable
3. Beware that Organizational culture can drive individual behavior
4. Understand that Blame fix nothing. Learning is more important
5. Leaders response to failure is matter

(Conklin, 2020)

Evaluate Current Safety Practices in your organization (Culture Survey, Performance Indicator, Audit & Verification)



Identify Areas for Improvement (Involving Front-liners, Deep Dive Analysis, Benchmarking)



Execute Changes & Monitor Outcome (Action Plan, Pilot Test for Learning, Close Loop Feedback)



Empower Workforce (Communication, Training, Coaching, Recognition, Active Participation)

Tips to start & sustain



1. Leadership must evaluate the current state of focus areas, then prioritize when to focus on each over the course of **a multiyear strategy**.
2. Gathering perspectives from key stakeholders (employees, supervisors and managers) and experts (other industries, etc.) to prioritize an improvement plan or create a more robust safety improvement strategy.
3. Start with “small things” to improve then create a snow ball effect to multiply positive safety culture
4. Allocate and invest your time, cost, resources and energy to improve safety ☐
COMMITMENT & CONSISTENCY

Next step

Take a moment, reflect, and evaluate your current organization :

- ☐ Where are you at currently
- ☐ Where do you want to be
- ☐ How will you get there



Discussion, Q&A



thank you

